



1-9-4

EU 934722537 US

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL  
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(to be used for all correspondence after initial filing)

Application Number 10/634,020

Filing Date 08/04/2003

First Named Inventor Lu et al.

Art Unit 3742

Examiner Name

Attorney Docket Number 12004

Total Number of Pages in This Submission

**ENCLOSURES (Check all that apply)**

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Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	William B. Richards, Reg. #44,301
Signature	
Date	01/08/2004

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**PATENT APPLICATION****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Group: 3742

Attorney

Docket: 12004

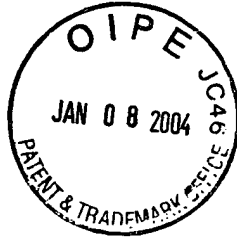
Applicant: Lu et al.

Title: Resistance Spot Welding Electrode

Serial No.: 10/634,020

Filed: 08/04/2003

Examiner:

Certificate Under 37 CFR § 1.10

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on

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*Judy Readman*  
Judy Readman

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith are patents, publications, or other information, which may be material, as defined in 37 CFR § 1.56(b), to the examination of this application, and in respect of which, there may be a duty to disclose in accordance with 37CFR § 1.56(a). Also submitted herewith are forms PTO/SB/08A and 08B on which are listed all cited items of information.

The following references are enclosed:

US Patent Documents:

1,176,614                      03/21/1916                      A. M. Stanley

1,982,098                      11/27/1934                      A. M. Hartmann

3,592,994	07/13/1971	L. A. Ford
3,689,731	09/05/1972	W. K. Miller
3,930,139	12/30/1975	Bykhovsky et al.
3,976,853	08/24/1976	Trattner et al.
4,304,984	12/08/1981	Bolotnikov et al.
4,339,653	07/13/1982	Doyle et al.
4,34,3983	08/10/1982	Schneider et al.
4,514,612	04/30/1985	H. A. Neid
4,766,349	08/23/1988	Johansson et al.
5,066,845	11/19/1991	S. L. Anderson
5,105,061	04/14/1992	G. D. Blankenship
5,200,594	04/06/1993	Okada et al.
5,310,988	05/10/1994	Couch et al.
5,601,734	02/11/1997	Luo et al.
5,611,945	03/18/1997	Kuwabara et al.
5,676,864	10/14/1997	J. K. Walters
5,844,194	12/01/1998	Kuwanara et al.
6,114,650	09/05/2000	Marner et al.
6,130,399	10/10/2000	Lu et al.
6,177,647	01/23/2001	J. Zapletal
6,191,381	02/20/2001	A. Kabir
6,225,591	05/01/2001	Nippert et al.
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6,452,130	09/17/2002	Qian et al.
6,483,070	11/19/2002	Diehl et al.

Other Art – Non-Patent Literature Documents

Evaluating Electrodes; Practical Welding Electrodes; J. A> Schroeder et al.; January 10, 2002; [www.thefabricator.com/xp/Fabricator/Articles/Welding/We102/02web318.xml](http://www.thefabricator.com/xp/Fabricator/Articles/Welding/We102/02web318.xml)

Transient Thermal Anaysis of Spot Welding Electrodes; Welding Research; Supplemental to the Welding Journal January, 1999; K. S. Yeung et al.; pp. 1s-6s

The Examiner is respectfully requested to initial the space adjacent to each document entry on FormsPTO/SB/08A and 08B and to return a copy of the initialed form to the undersigned to confirm that the documents have been considered and have been officially made of record.

While the information referred to in this Information Disclosure Statement may be material pursuant to 37 CFR §1.56(b), the filing of this Information Disclosure Statement is not intended, pursuant to 37 CFR §1.97(h), to constitute an admission that any patent, publication, or other information referred to is, or is considered to be, material to the patentability of this invention. Further, pursuant to 37 CFR §1.97(g), the filing of this Information Disclosure Statement should not be construed as a representation that a search has been made. Finally, the filing of this Information Disclosure Statement shall not be construed as a representation that no other material information exists and shall not be construed as an admission against interest in any manner.

Pursuant to 37 CFR § 1.97(b)(3), this Information Disclosure Statement is being filed before the mailing date of a First Office Action on the merits. Applicants believe no fees are due and payable in connection with this submission.

If the Examiner has any questions or wishes to discuss this Application, the Examiner is invited to telephone the undersigned representative at the number set forth below.

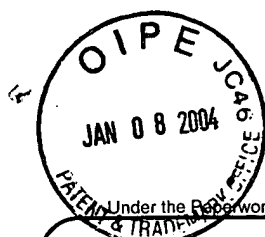
Respectfully submitted,



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	10/634,020
Filing Date	08/04/2003
First Named Inventor	Lu et al.
Art Unit	3742
Examiner Name	
Attorney Docket Number	12004

Sheet 1 of 3

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 1,176,614	03-21-1916	Stanley	
		US- 1,982,098	11-27-1934	Hartmann	
		US- 3,592,994	07-13-1971	Ford	
		US- 3,689,731	09-05-1972	Miller	
		US- 3,930,139	12-30-1975	Bykhovsky et al.	
		US- 3,976,853	08-24-1976	Trattner et al.	
		US- 4,304,984	12-08-1981	Bolotnikov et al.	
		US- 4,339,653	07-13-1982	Doyle et al.	
		US- 4,343,983	08-10-1982	Schneider et al.	
		US- 4,514,612	04-30-1985	Nied	
		US- 4,766,349	08-23-1988	Johansson et al.	
		US- 5,066,845	11-19-1991	Anderson	
		US- 5,105,061	04-14-1992	Blankenship	
		US- 5,200,594	04-06-1993	Okada et al.	
		US- 5,310,988	05-10-1994	Couch Jr., et al.	
		US- 5,601,734	02-11-1997	Luo et al.	
		US- 5,611,945	03-18-1997	Kuwabara et al.	
		US- 5,676,864	10-14-1997	Walters	
		US- 5,844,194	12-01-1998	Kuwabara et al.	

**FOREIGN PATENT DOCUMENTS**

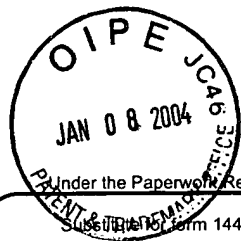
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

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Sheet 2

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Application Number	10/634,020
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First Named Inventor	Lu et al.
Art Unit	3742
Examiner Name	
Attorney Docket Number	12004

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 6,114,650	09-05-2000	Marner et al.	
		US- 6,130,399	10-10-2000	Lu et al.	
		US- 6,177,647 B1	01-23-2001	Zapletal	
		US- 6,191,381 B1	02-20-2001	Kabir	
		US- 6,225,591 B1	05-01-2001	Nippert et al.	
		US- 6,420,673 B1	07-16-2002	Nemchinsky	
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		US- 6,452,130 B1	09-17-2002	Qian et al.	
		US- 6,483,070 B1	11-19-2002	Diehl et al.	
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**FOREIGN PATENT DOCUMENTS**

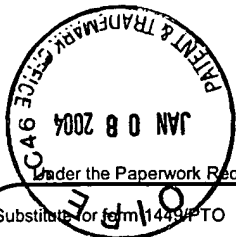
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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Applicant Number 10/634,020

Filing Date 08-04-2003

First Named Inventor Lu et al.

Art Unit 3742

Examiner Name

Attorney Docket Number 12004

Sheet 3

of 3

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	C1	J.A. SCHROEDER et al.; Evaluating Electrodes - Sample Test of Copper Electrodes During Resistance Welding of Aluminum; Practical Welding Today; 01/10/02; www.thefabricator.com	
	C2	K.S. YEUNG et al.; Transient Thermal Analysis of Spot Welding Electrodes; Welding Research; Supplement to Welding Journal, January, 1999; pp 1s-6s	

Examiner Signature	Date Considered
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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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